

**IN THE CLAIMS**

The following is a complete listing of claims which replaces all previous versions and listings of the claims.

1. (previously presented) A method for operating a computing device, comprising:  
tabulating resources of the computing device into one or more resource  
tables;  
allocating resources from one or more of the resource tables to a plurality of  
resource sets prior to loading a desired O/S layer for the computing  
device; and  
loading a desired operating system on each set of the plurality of resource sets at  
the desired O/S layer.
2. (original) The method of claim 1, wherein allocating resources comprises  
organizing the resources in a ROM-based environment.
3. (original) The method of claim 2, wherein organizing the resources in the  
ROM-based environment comprises gathering device data from a BIOS module.
4. (original) The method of claim 1, wherein allocating resources comprises  
dividing the resources in an initialization phase of the computing device.
5. (original) The method of claim 4, wherein allocating resources comprises  
sharing at least a portion of the resources.
6. (original) The method of claim 1, wherein allocating resources comprises  
identifying and initializing at least a portion of the resources.
7. (original) The method of claim 1, wherein allocating comprises manually  
selecting desired allocations of the resources via a user interface.

8. (original) The method of claim 1, comprising running multiple desired operating systems at the desired O/S layer on the computing device.

9. (previously presented) A method for simultaneously supporting a plurality of independent operating systems on a computing device, comprising:

cataloguing resources of the computing devices prior to O/S booting for the  
computing device;

dividing the resources into multiple subsets prior to O/S booting wherein dividing  
the resources comprises partitioning the resources with an extensible  
firmware interface; and

loading the plurality of independent operating systems, at least one O/S being  
loaded on each resource set of the multiple subsets.

10. (original) The method of claim 9, wherein the plurality of independent operating systems provide independent platforms for loading and running application software.

11. (original) The method of claim 10, wherein cataloguing, dividing and loading are performed in an initialization phase of the computing device.

12. (original) The method of claim 9, wherein dividing the resources comprises allocating desired portions of hardware and system services to each of the multiple subsets.

13. (original) The method of claim 12, wherein allocating desired portions of hardware and system services comprises sharing the system services between the multiple subsets and the independent operating systems loaded thereon.

14. (previously presented) A system for booting a computing device, comprising:  
an extensible firmware interface comprising:

a resource tabulator module configured to organize data on  
system resources for the computing device; and  
a resource divider module configured to create multiple resource  
sets for the computing device; and  
an operating system loader module configured to load a desired operating  
system on each of the multiple resource sets.

15. (original) The system of claim 14, wherein the resource tabulator module and  
the resource divider module are disposed in a pre-boot environment.

16. (original) The system of claim 15, wherein the resource tabulator module and  
the resource divider module are disposed in ROM.

17. (original) The system of claim 14, wherein the pre-boot environment  
comprises hardware detection modules for the system resources.

18. (original) The system of claim 14, wherein the pre-boot environment  
comprises hardware driver modules for the system resources.

19. (original) The system of claim 14, wherein the resource divider module  
comprises a user interface.

20. (original) The system of claim 14, wherein the resource divider module  
comprises a hardware partitioning module.

21. (previously presented) A system comprising:  
a resource tabulator module configured to obtain resource tables associated  
with a computing device;  
a resource divider module configured to create multiple resource sets from the  
resource tables;

an operating system loader module configured to load a desired operating system on each of the multiple resource sets; and  
an interrupt controller module configured to detect and deliver interrupts to at least one of the operating systems through a peripheral components interconnect ("PCI") bus.

22. (previously presented) The system of claim 21, comprising redirection registers, wherein the interrupt controller module is configured to communicate through the PCI bus via the redirection registers.

23. (previously presented) The system of claim 22, wherein the redirection registers comprise extended identifiers for identifying a processor within one of the resource sets.

24. (previously presented) The system of claim 21, wherein the interrupt controller module comprises a legacy system.